

International Master Courses in

"PROTECTION AGAINST CBRNe EVENTS"

The evolution and increase in Safety and Security threats at an international level place remarkable focus on the improvement of the emergency systems to deal with crisis, including those connected to ordinary and the non-conventional events (Chemical, Biological, Radiological, Nuclear, and explosives).

In every industrial Country there are multiple entities with specialized teams in very specific fields, but the complexity of the events requires professionals that not only have specific know-how, but also expertise in the relevant areas.

Given the global interest in these issues, the Department of Industrial Engineering and the Faculty of Medicine and Surgery of the Tor Vergata University organize the international Master Courses in "Protection against CBRNe events": I Level Master Course in "Protection against CBRNe events" (120 ECTS) and II Level Master Course in "Protection against CBRNe events" (60 ECTS). These courses aim at providing attendees with comprehensive competences in the field of CBRNe Safety and Security, through teaching and training specifically focusing on real needs.

The creation of the "Click & Read" newsletter, that connects directly to the International CBRNe Master website simply clicking on the blue titles of each news, would be a monthly appointment about the main news around International CBRNe Master Courses... and more!

Enjoy!!!

Chemical, Biological, Radiological, Nuclear and explosive Department of Industrial Engineering and School of Medicine and Surgery

Click & Read Nº 49 - August 2018

08.01.2018 - VIOLENZA POLITICA, SICUREZZA ALIMENTARE E FLUSSI MIGRATORI: L'ARMA LETALE DELLA "FAME"

Gentili colleghi, è con piacere che comunichiamo l'avvenuta pubblicazione dell'articolo: Violenza politica, sicurezza alimentare e flussi migratori: l'arma letale della "fame" sulla rivista online: Safety&Security a cura della Dr.ssa Stefania Moramarco (Ricercatrice dell'Università di Roma Tor Vergata, Dipartimento di Biomedicina e Prevenzione) e dell'Ing. Marco Carbonelli (Presidenza del Consiglio dei Ministri) entrambi studenti della ottava edizione del #MasterCBRN di secondo livello (in corso).

L'aumento di movimenti estremisti e il verificarsi di attacchi terroristici in uno scenario di diffusa violenza politica in molte regioni del mondo ha fatto crescere negli ultimi anni la preoccupazione a livello mondiale per il sempre più ingente numero di comunità affette da instabilità politico-economica. Tali scenari conflittuali, spesso esacerbati anche dai disastri naturali ed da situazioni di emergenza, rischiano di tradursi per la popolazione dei Paesi a risorse limitate (i cosiddetti low-middle income countries) in un aumento diffuso della povertà fino a crisi acute in ambito di disponibilità alimentare, con un impatto immediato sulla dimensione dei flussi migratori, sia in territori limitrofi sia oltrepassando i confini internazionali. L'obiettivo di questo articolo è quello di analizzare la relazione bidirezionale tra violenza politica e sicurezza alimentare, supportando l'ipotesi di partenza che riconoscere e investire per assicurare il diritto al cibo sia essenziale, non solo in quanto diritto fondamentale dell'uomo, ma in maniera più generale per contribuire alla sicurezza interna e alla stabilità politica dei Paesi, anche quale forma di mitigazione del fenomeno dei flussi migratori di rifugiati e richiedenti asilo in Stati diversi da quello di appartenenza, o di Internally Displaced Persons -IDPs (persone dislocate internamente).

Per leggere tutto l'articolo clicca qui:

https://www.safetysecuritymagazine.com/articoli/violenza-politica-sicurezza-alimentare-eflussi-migratori-larma-letale-della-fame/

International CBRNe Master Courses

Chemical, Biological, Radiological, Nuclear and explosive Department of Industrial Engineering and School of Medicine and Surgery

Click & Read Nº 49 - August 2018

07.30.2018 - "IL TESTIMONE DEL VOLONTARIATO"

Gentili colleghi, è con piacere che riportiamo questa notizia che arriva dal nostro docente (ed ex studente) Dr. Luca Rotondi:

Cagliari: il 27 luglio 2018 si è tenuta la terza edizione del "Il Testimone del volontariato" a cui hanno partecipato molte associazioni della Sardegna. Emergenza Sordi a 360 gradi ha avuto un riconoscimento (terzo posto) grazie al lavoro di squadra costituita dalla dott.ssa Marta Zuddas, dott. Luca Rotondi e sig Davide Mauri.

Emergenza Sordi a 360 gradi si è distinta per la sua passione, studio e dedizione in campo emergenziale volta a sensibilizzare l'opinione pubblica per potenziare i mezzi di comunicazione e adattarli al pubblico sordo. È stata la prima a fare video comunicati su come comportarsi in caso di disastri di natura artificiali e/o naturali utilizzando la Lingua dei Segni Italiana, i sottotitoli e la voce per raggiungere la maggior parte della popolazione. Potenziare le informazioni di carattere emergenziale da inserire tramite i social network è un imperativo morale, garantisce equità e limita l'isolamento. Un altro punto di notevole importanza è che i disaster managers e/o i coordinatori emergenziali siano adeguatamente addestrati all'approccio e alla comunicazione emergenziale con le persone sorde.

Andando avanti con la nostra missione ci siamo resi conto che c'è ancora tantissimo lavoro da fare: pregiudizi e barriere da buttare giù, poca accessibilità ai servizi in generale, ma ogni piccolo passo che riusciamo a fare è una grande conquista.

Dott.ssa Marta Zuddas, Dott. Luca Rotondi, Sig. Davide Mauri

International CBRNe Master Courses

Chemical, Biological, Radiological, Nuclear and explosive Department of Industrial Engineering and School of Medicine and Surgery

Click & Read Nº 49 - August 2018

07.29.2018 - MODULE 6 - 1ST LEVEL MASTER COURSE ON EXPLOSIVE

Dear colleagues,

It is a pleasure announce that the candidates of the first level @MasterCBRN have completed the explosive module with a tailored Table Top Exercise that they have completed this morning.

The capability to organize these activities and let the students train in such complex emergencies simulations is something that #INAC organizes in an excellent way. We want to thank Michael Thornton and Alba Jannotti for their effort in that.

STAY TUNED!!



International CBRNe Master Courses



Click & Read N° 49 - August 2018

07.28.2018 - MODULE 7 - 2ND LEVEL MASTER COURSE -COMMUNICATION

Dear colleagues, yesterday 26 of July 2018 was the last day of the module communication and psychology for the II Level #MasterCBRN. The students had the opportunity to assist at two amazing lectures:

- Dieter Rothbacher, MsC (#SASIR) that in the morning had the opportunity to share his expertise on CBRNe and focus the attention on the duties of an Advisor of Decision Maker in case of CBRNe emergencies;

- Dr. Igor Vitale (lecturer of CISINT) that has done an interesting lecture on a fundamental topic that is the capability to detect lies analyzing the face and body expressions.



Chemical, Biological, Radiological, Nuclear and explosive Department of Industrial Engineering and School of Medicine and Surgery

Click & Read N° 49 - August 2018

07.27.2018 - MODULE 7 - 2ND LEVEL MASTER COURSE -COMMUNICATION

Dear colleagues, the module on CBRNe communication and psychology in case of CBRNe events for our second level #MasterCBRN is going on.

The 23 of July 2018 we had:

- Dr Francesco Unali, a professional journalist and former student of the II level Master course actually employee in the Campus X University, that has done an interesting lecture on the main communication techniques and the main differences between a news and a tech information;

- Prof. Stephen Johnson (Cranfield University) that has done an interesting overview of the main CBRN emergency management facing interesting case study and involving all the class. Prof. Johnson is a great lecturer.

The 24 of July 2018 we had:

- Dr. Luca Rotondi, he is in charge for the deaf communication in the Comune di Roma. Luca has done an interesting lecture on the Deaf communication techniques in a disaster, he teaches also the finger alphabet and special techniques for communication in case of emergencies.

- Dr. Federico Sesler (CISINT) that has done an amazing lecture on OSINT communication and the use of the web for terroristic purposes.

International CBRNe Master Courses

Chemical, Biological, Radiological, Nuclear and explosive Department of Industrial Engineering and School of Medicine and Surgery

Click & Read N° 49 - August 2018

07.26.2018 - MODULE 6 - 1ST LEVEL MASTER COURSE ON EXPLOSIVE

Dear colleagues, the 24-25 July 2018 we did continue the activities of module 6 on explosive for the first Level #MasterCBRN

The 24 of July we had as lecturers:

- Dr. Massimo Pedemonte (Italian Police State Department) that talks #EOD, #IED, #HME: case studies. #Dirty #bombs
- Dr. Lorenzo di Bella that gave an #explosives overview: Composition, production, use
- BMD spa that is an Italian company specialized in the CBRNe detection, they come together with FLIR to expose the principal instruments for explosive detection
- Dr. Chiara Telloli (ENEA): laser spectroscopy applied to the detection of explosive precursors

The 25 of July we had as lecturers:

- Prof. Stephen Johnson (Cranfield University) that had a lecture on IED containing CBR agents. He presented interesting case studies to the students
- Dr. Roberta Fantoni (ENEA) that had a lecture on spectroscopy diagnostics for remote and in situ detection of hazardous species
- Antonio Palucci (ENEA) that had a lecture on contribution to the technologies for security topic
- Luigi De Dominicis (EDEN project) that had a lecture on the large scale demonstration project
- Roberto Chirico (ENEA) that had a lecture on rethinking layers of defence of critical infrastructures: application of proximal/stand-off detectors

International CBRNe Master Courses









Click & Read Nº 49 - August 2018

07.25.2018 - MODULE 6 - 1ST LEVEL MASTER COURSE ON EXPLOSIVE

Dear colleagues, yesterday 23 July of the first level @MasterCBRN started the module on the explosive used in case of CBRNe events.

They started with Mr. Alan Kearney (standing contributor to EDA-led policy) that has done an interesting lecture about what is an explosive, the history of explosives, unconventional warfare, the rise of IED.

In the afternoon they had a lecture with Cap. Jan Tarnoci from the EOD COE of Trenčin (Slovacchia). He has presented the activities of his centre, the main principle of an EOD and the capabilities and EOD support to operations,



DO NOT LOSE THE CHANCE TO ENJOY OUR #MasterCBRN

International CBRNe Master Courses



Click & Read Nº 49 - August 2018

07.24.2018 - MODULE 7 - 2ND LEVEL MASTER COURSE -COMMUNICATION

Dear colleagues, yesterday 23 of July 2018 the students of the second level Master course have started the module focused on communication in case of CBRNe events for the second level @MasterCBRN.

They started with an expert in this sector, Dr. Aino-Maria Ruggiero from the Jyväskylä University School of Business and Economics (Finland) that has addressed critical factors in the communication of public authorities with stakeholders, such as citizens, news, and other response organizations before, during and after CBRN emergency.

In the afternoon the students have done a visit to the Police Headquarter Control Room. The students had the chance to visit a real operative centre and we want to thank the Police State Department and Ing. Roberto Maugeri to let it possible.



International CBRNe Master Courses



Click & Read Nº 49 - August 2018

07.23.2018 - R/N AGENTS. RADIOLOGICAL AND NUCLEAR AGENTS AWARENESS, INDUSTRY, MEDICAL & MILITARY

Dear colleagues, it is a pleasure announce that the module 5 of the first level Master course in Protection against CBRNe events (R/N AGENTS. Radiological and nuclear agents awareness, industry, medical & military) has been successfully concluded with a Table Top Excercise organized by #INAC.

Micheal Thornton and Alba lannotti have involved the students in a TTX simulating an R accident and pushing the candidates to act as first responders in this particular scenario.

STAY TUNED for the last week news before the summer breaks.



International CBRNe Master Courses



Click & Read Nº 49 - August 2018

07.20.2018 - R/N AGENTS. RADIOLOGICAL AND NUCLEAR AGENTS AWARENESS, INDUSTRY, MEDICAL & MILITARY

Dear colleague, it is a pleasure announce that yesterday we had the last lecture of the module R/N of the first level #MasterCBRN before the Table Top Excercise.

Dr. Massimo Pinto, from ENEA (Casaccia) has explained the main effects of the radiation on the human body. It has been an interesting and interactive lecture, thank you Massimo.

In the afternoon the students started the TTX with the colleagues of **#INAC** that will finish today.



International CBRNe Master Courses



Click & Read Nº 49 - August 2018

07.19.2018 - R/N AGENTS. RADIOLOGICAL AND NUCLEAR AGENTS AWARENESS, INDUSTRY, MEDICAL & MILITARY

Dear colleagues, we are glad to communicate that yesterday the class of the first level #MasterCBRN had an interesting lecture by Dr Carlos Rojas Palma from SCK•CEN Belgian Nuclear Research Centre (https://www.sckcen.be/).

Dr. Rojas Palma had an interesting lecture on nuclear plants safety and security, dirty bombs and he talked also about his centre. In the afternoon he organized a drill exercise for the student.



International CBRNe Master Courses



Click & Read Nº 49 - August 2018

07.18.2018 - R/N AGENTS. RADIOLOGICAL AND NUCLEAR AGENTS AWARENESS, INDUSTRY, MEDICAL & MILITARY

Dear colleagues, yesterday we had the second day of the R/N Module of the first level #MasterCBRN, the students have been involved in an interesting lecture in the morning held by Dr. Miloš Živanović, from Vinca Institute of Nuclear Sciences.

In the afternoon the students work with Xavier Sabate, from the Institut de Seguretat Pública de Catalunya, has organized an interesting TTX in class with the students.

We are very thankful to all the lecturers and the Entities that let it possible.





Click & Read Nº 49 - August 2018

07.17.2018 - R/N AGENTS. RADIOLOGICAL AND NUCLEAR AGENTS AWARENESS, INDUSTRY, MEDICAL & MILITARY

Dear colleagues, it is a pleasure announce that yesterday we have started the module "R/N AGENTS. Radiological and nuclear agents awareness, industry, medical & military" for the first level CBRNe Master course.

The module has been started by Prof. Francesco d'Errico, University of Pisa and University of Yale (that is also scientific coordinator of this module for #MasterCBRN) and Lt. Col. Raffaele Zagarella (CISAM-Pisa). The lecturers have involved the class in an interesting exchange to learn the basic of RN risks.





Click & Read Nº 49 - August 2018

07.03.2018 - MULTIWAVELENGTH DIFFERENTIAL ABSORPTION LIDAR TO IMPROVE MEASUREMENT ACCURACY: TEST WITH AMMONIA OVER A TRAFFIC AREA

Dear colleagues,

It is a pleasure to announce that a new paper has been published in the prestigious scientific journal Applied Physics B - Laser and Optics:

<u>Riccardo Rossi, Jean-François Ciparisse, Andrea Malizia, Michela Gelfusa,</u> <u>Pasquale Gaudio (2018).</u> "**Multiwavelength differential absorption lidar to** <u>improve measurement accuracy: test with ammonia over a traffic area".</u> <u>Applied Physics B (2018) 124:148, https://doi.org/10.1007/s00340-018-</u> 7018-6

Link: https://link.springer.com/article/10.1007/s00340-018-7018-6

Greetings to all the authors and special greetings to our young and talented Riccardo Rossi, Ph.D. student at Quantum Electronics and Plasma Physics Research Group.





If you want to see more reach us on

facebook Master Cbrne Tor Vergata

Master courses in Protection

against CBRNe Events Linked in

